FlexWave™ WMX 3000

WiMAX Single-sector Base Station

The FlexWave™ WMX 3000 delivers industry leading WiMAX technology into a single-sector "stackable" form factor. For service providers seeking entry into the WiMAX market or those expanding coverage of an existing network, the FlexWave WMX 3000 is an economical and elegant solution. Its space-saving design allows operators a carrier-grade platform from which to launch premium voice, multimedia and data services.

The FlexWave WMX 3000 operates seamlessly within a heterogeneous network by synchronizing with other FlexWave WMX base stations in the same cell. The system offers a broad range of deployment options including operation as a single-sector base station or operation within a multi-sector cell site configured through WaveCenter EMS Pro provisioning. Fully compliant with the IEEE 802.16-2004 standard, FlexWave WMX 3000 supports fixed and nomadic WiMAX applications and seamlessly integrates into a network consisting of mobile 802.16e-2005 WiMAX.

Features

- Comprehensive 1U indoor unit
- Split design compatible with all FlexWave WMX outdoor radios
- Per-subscriber link management
- Stackable design supporting pay-as-you-grow business model
- Seamless co-location with multi-sector base stations for expanded network coverage

SPEC SHEET

www.adc.com • +1-952-938-8080 • 1-800-366-3891

FlexWave™ WMX 3000

WiMAX Single-sector Base Station

The FlexWave™ WMX 3000 operates in licensed and license-exempt bands under virtually all wireless conditions including LOS, OLOS, and NLOS, giving providers a versatile platform for maximizing WiMAX revenue opportunities. The FlexWave WMX 3000 is an effective wireless access point for hundreds of simultaneously active subscriber units serving both outdoor and indoor applications.

The FlexWave WMX 3000 uses a split IDU/ODU design with the 1U rack mountable indoor unit performing IP networking, backhaul and radio control functions. The outdoor unit consists of a spectrum-specific radio and antenna connecting to the indoor unit via coax cable carrying power, timing, and control signals.

Typical Applications

- Last mile, carrier deployments supporting small initial roll outs, growing to support hundreds of subscribers
- Converged fixed-mobile service offering including multi-user, multi-application, and multi-service simultaneously
- Scalable VoIP service with per-flow QoS and dynamic link adjustment
- Wireless applications desired by indoor consumers of WiMAX including DSL bypass and extended Wi-Fi coverage
- Fixed WiMAX service evolving to support mobile subscribers
- Bandwidth hungry video and data applications requiring low latency and predictable performance

9/07 • 1036693AE FlexWave™ WMX 3000

FlexWave™ WMX 3000

WiMAX Single-sector Base Station

Specifications

RADIO AND SYSTEM SPECIFICATIONS	
Compliance:	IEEE 802.16-2004 (3.5T1, 3.5T2), ETSI HiperMAN
Duplexing Mode, PHY:	TDD, OFDM 256 FFT
Frequency:	3.3 – 3.4 GHz, 3.4 – 3.6 GHz, 5.725 – 5.925 GHz Future: 3.6 – 3.8 GHz, 5.15 – 5.35 GHZ, 5.475 – 5.725 GHz
Channel Bandwidth:	1.75 MHz, 3 Mhz, 3.5 MHz, 5.0 Mhz, 5.5 MHz, and 7.0 MHz,
Step Size:	250 KHz
Radio Output Power:	17 dBm, 20 dBm, 30 dBm options
Receiver Sensitivity:	-95.1 dBm
Modulation:	BPSK, QPSK, 16QAM, 64QAM
Forward Error Correction:	Convolution coding 1/2, 2/3, 3/4
IP NETWORKING FEATURES/OPTIONS	
IP Version:	IPV4 (RFC 791)
Bridging Mode:	IEEE 802.3d
Routing:	RIP V2, OSPF (future)
VLANs:	IEEE 802.1 P/Q
SECURITY/ENCRYPTION	
Authentication:	X.509 based authentication
Encryption:	3DES, AES CCM 128, 1024
MULTI-SERVICE/MULTI-USER SUPPORT	
Traffic Classification:	MAC DA/SA, 802.1 P/Q, IP SA/DA, IP Protection, IP TOS, TCP/UDP Port
Scheduling/QoS:	UGS, rtPS, nrtPS, BE, CIR, MIR
Max # Sectors:	single
Active Connected Subscriber Units:	512 per sector
Uni-directional Service Flows:	up to 7168 per sector
PHYSICAL INTERFACES	
RF Sectors, IF Port:	1 x IF Port for connection to BSR (Type-F, Female, 75 Ohm)
Backhaul:	1 x 10/100 BT (RJ45)
Management:	RS-232 (DB9)
External clock, Synchronization:	10 MHz Clock (BNC) /1 Hz Sync (BNC)
MANAGEMENT	
Remote Management and Monitoring:	WaveCenter EMS Pro, CLI (Telnet), SNMP
Local Management and Monitoring:	CLI (RS 232)
Provisioning:	Centralized using WaveCenter EMS Pro (SNMP)
SNMP:	MIB II (RFC 1213), Enterprise MIB; SNMP V2, IEEE 802.16f MIB
MECHANICAL	
Indoor Unit Dimensions (W*H*D)/weight:	42.0 x 4.2 x 27.0 cm / 16.5" x 1.65" x 10.6"/5.5 kg (12 lbs.)
Outdoor Unit (W*H*D)/weight:	29.8 x 7.0 x 29.8 cm / 11.75" x 2.75" x 11.75"/4.5 kg (10 lbs.)
IDU-ODU Distance:	up to 250 m
ELECTRICAL	
Input DC Voltage:	DC 40 – 60V
Input AC Voltage:	85 VAC – 265 VAC
Max Power Consumption:	70 W

ENVIRONMENTAL	**Indoor**	**Outdoor**
Weather Protection:	na	IP65/NEMA-4
Operation Temperature:	0° to 40° C	- 35° to 60° C
Humidity:	10 - 90%, non-condensing	0 - 95%, non-condensing
RoHS Compliance:	yes	yes

9/07 • 103693AE FlexWave™ WMX 3000

SPEC SHEET

Web Site: www.adc.com

From North America, Call Toll Free: 1-800-366-3891 • Outside of North America: +1-952-938-8080

Fax: +1-952-917-3237 • For a listing of ADC's global sales office locations, please refer to our Web site.

ADC Telecommunications, Inc., P.O. Box 1101, Minneapolis, Minnesota USA 55440-1101

Specifications published here are current as of the date of publication of this document. Because we are continuously improving our products, ADC reserves the right to change specifications without prior notice. At any time, you may verify product specifications by contacting our headquarters office in Minneapolis. ADC Telecommunications, Inc. views its patent portfolio as an important corporate asset and vigorously enforces its patents. Products or features contained herein may be covered by one or more U.S. or foreign patents. An Equal Opportunity Employer

103693AE 9/07 Revision **© 2007 ADC Telecommunications, Inc. All Rights Reserved**